

C2
Sub
D1

8. (Thrice Amended) The dish rack according to Claim 1, wherein said coating comprises substantially polyamide.

C3
Sub
D1

14. (Twice Amended) In combination, the dishwasher apparatus of Claim 9, wherein said coating comprises substantially polyamide.

REMARKS

Favorable reconsideration of this application, as presently amended and in light of the following discussion, is respectfully requested.

Claims 1, 2, 4-6 and 8-14 are presently pending in this application, Claims 8 and 14 having been amended by the present amendment.

In the outstanding Office Action, the title of the application was objected to for not being descriptive; Claims 8 and 14 were rejected under 35 U.S.C. §112, second paragraph, for being indefinite; Claims 1, 2, 6, 8-10, 13 and 14 were rejected under 35 U.S.C. §103(a) as being unpatentable over Llewellyn (U.S. Patent 4,748,993); and Claims 4, 5, 11 and 12 were rejected under 35 U.S.C. §103(a) as being unpatentable over Llewellyn as applied to Claims 1, 2, 6, 8-10, 13 and 14, and further in view of Keeny et al. (U.S. Patent 6,018,000).

In response to the objection to the title of the present application, a new title for the subject invention has been submitted herewith. The new title is believed to be fully descriptive of the present invention and no further objection to the title is therefore anticipated.

With regard to the rejection under 35 U.S.C. §112, second paragraph, Claims 8 and 14 have been amended to clarify the subject matter recited therein. Thus, Claims 8 and 14 are believed to be in compliance with the requirements of the statute. If, however, the Examiner

disagrees with any of the claim amendments above, the Examiner is invited to telephone the undersigned who will be happy to work in a joint effort to derive mutually satisfactory claim language.

Before addressing the outstanding art rejections, a brief summary of Claim 1 is believed to be helpful. According to Claim 1 of the present invention, a dish rack for a dishwasher includes a frame, and a coating covering the frame and having a surface roughness of $R_z \geq 5 \mu\text{m}$. One of the advantages attributable to such a coating is that the dish rack distributes water over the surface of the coating in a film sufficiently thin to evaporate with a small amount of heat.¹

The outstanding Office Action asserts that “although Llewellyn ‘993 does not disclose the roughness of the coating, it can be seen from Figure 3 that the coating is smooth,” and that “[a]ccordingly, it would have been obvious ... to have fabricated the frame having a coating with a surface roughness, as called for in the claims and as determined through routine experimentation and optimization, thereby decreasing the risk of corrosion.” It is, however, respectfully submitted that “[t]he mere fact that references can be combined or modified does not render the resultant combination obvious unless the prior art also suggests the desirability of the combination.”² and that “[a] particular parameter must first be recognized as a result-effective variable, i.e., a variable which achieves a recognized result, before the determination of the optimum or workable ranges of said variable might be characterized as routine experimentation.”³ In general, a smooth surface is preferred over a rough surface for a dishwasher rack as stated in the Office Action, and thus using a plastic

¹ Specification, page 3, lines 6-22.

² *In re Mills*, 916 F.2d 680, 16 USPQ2d 1430 (Fed. Cir. 1990).

³ MPEP 2144.05, citing *In re Antonie*, 559 F.2d 618, 195 USPQ 6 (CCPA 1977).

such as nylon, a coating technique such as a fluidized bed coating produce very smooth coatings having a surface roughness below 1 microns. On the contrary, Applicants have discovered that *by increasing a surface roughness to a certain micro-roughness on the surface of the coating, water is distributed over the surface of the coating and becomes thin films, not drops, on the surface of the coating, thereby evaporated by a small amount of heat.*⁴ Figure 3 of Llewellyn merely shows a sectional end view of the rack, and clearly does not illustrate the surface of the rack such that any degree of smoothness or micro-roughness imparted on its surface can be ascertained. Furthermore, as stated in the Office Action, Llewellyn clearly fails to disclose or suggest any micro-roughness on the surface of the coating, i.e., the result-effective variable. Nor does Llewellyn disclose or suggest the distribution of water over the surface of the coating such that the water becomes thin films and thus evaporated by a small amount of heat, i.e., the result recognized by Applicants. As such, it is respectfully submitted that without any motivation, suggestion, or recognition of the result and result-effective variable prescribed by MPEP, the outstanding obviousness rejection based on Llewellyn is believed to be predicated upon an impermissible hindsight guided by Applicants' disclosure. Applicants therefore respectfully submit that the structure recited in Claim 1 is patentably distinguishable from Llewellyn.

Keeny et al. only disclose mixtures of thermoplastic vinylidene fluoride based resins and polyamide resins to be coated on various wire goods, and nowhere do Keeny et al. teach a coating covering the frame and having a surface roughness of $R_z \geq 5 \mu m$, as recited in Claim 1. Therefore, the structure recited in Claim 1 is clearly distinguishable from Keeny et al.

⁴ MPEP 2145, citing *In re Hedges*, 783 F.2d 1038, 228 USPQ 685 (Fed. Cir. 1986), states that "[t]he totality of the prior art must be considered, and proceeding contrary to accepted wisdom in the art is evidence of nonobviousness."

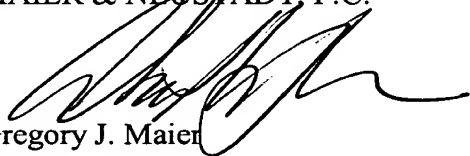
Because Claim 9 is believed to include subject matter substantially similar to what is recited in Claim 1 to the extent discussed above, Claim 9 is also believed to be distinguishable from Llewellyn and Keeny et al.

For the foregoing reasons, Claims 1 and 9 are believed to be allowable. Furthermore, since Claims 2, 4-6, 8 and 10-14 ultimately depend from either Claim 1 or 9, substantially the same arguments set forth above also apply to these dependent claims. Hence, Claims 2, 4-6, 8 and 10-14 are believed to be allowable as well.

In view of the amendments and discussions presented above, Applicants respectfully submit that the present application is in condition for allowance, and an early action favorable to that effect is earnestly solicited.

Respectfully submitted,

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May 19, 2003

IN THE TITLE

Please replace the current title with the following:

[DISH RACK FOR A DISHWASHER]

--A DISHWASHER RACK HAVING PLASTIC COATING WITH MICRO
ROUGHNESS--

IN THE CLAIMS

Please amend Claims 8 and 14 as follows:

--8. (Thrice Amended) The dish rack according to Claim 1, wherein said coating comprises [at least] substantially polyamide.

14. (Twice Amended) In combination, the dishwasher apparatus of Claim 9, wherein said coating comprises [at least] substantially polyamide.--